



Duke A. Bennett  
*Mayor*

# The City of Terre Haute

Combined Sewer Overflow  
and  
Federal Government Mandates

Duke A. Bennett, Mayor



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# Introduction

The purpose of the information contained in this presentation is to help educate the public concerning the City's plans to best comply with a non-funded, U.S. Government mandate concerning the treatment of storm water. Specifically, the City would like to present factual information concerning one part of the overall solution to this mandate – the use of a storage lagoon located in the southeast part of the City.



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# Introduction (continued)

As is the case with many programs that include several levels and layers of government, this is a complex issue.

If you need additional information, or clarification, please contact Mayor Duke Bennett's office at (812) 232-9467 or by email at [mayor@terrehaute.in.gov](mailto:mayor@terrehaute.in.gov)

This project is being completed by the following:

The City of Terre Haute Engineering Office  
Terre Haute Waste Water Utility  
Hannum, Wagle and Cline Engineering (consultants)



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# Background

In 1999, the U.S. Environmental Protection Agency (EPA) mandated that the City of Terre Haute come into compliance with federal law concerning clean water and the Wabash River.

The Indiana Department of Environmental Management (IDEM) is the regulatory body of government that will oversee and approve of the City's method of compliance.

The City is currently working on a solution for handling our sewage and rain water during times of significant rainfall.



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# Quick History of our Sewer System

- Cir 1860 - Sewer lines in the City were built to collect sewage and rainwater and then route directly to, and empty into, the Wabash River
- Cir 1960 - the Treatment Plant was built along with the main interceptor (the large pipe that runs primarily North-South along the river) to capture the sewage and treat it
- The interceptor was designed to handle only sanitary sewage at a “normal” rate – overflows to the river were common and acceptable
- Cir 2010 – Most of our current system still uses the above components, including the brick built lines from the 1800’s



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# Main Interceptor

The following five slides show a graphic representation of where the Main Interceptor is located. The bright green line, which runs North-South through each slide is the Main Interceptor, from near Locust St. to the treatment plant. The short green lines, with yellow endpoints, represent overflow pipes that flow to the river:





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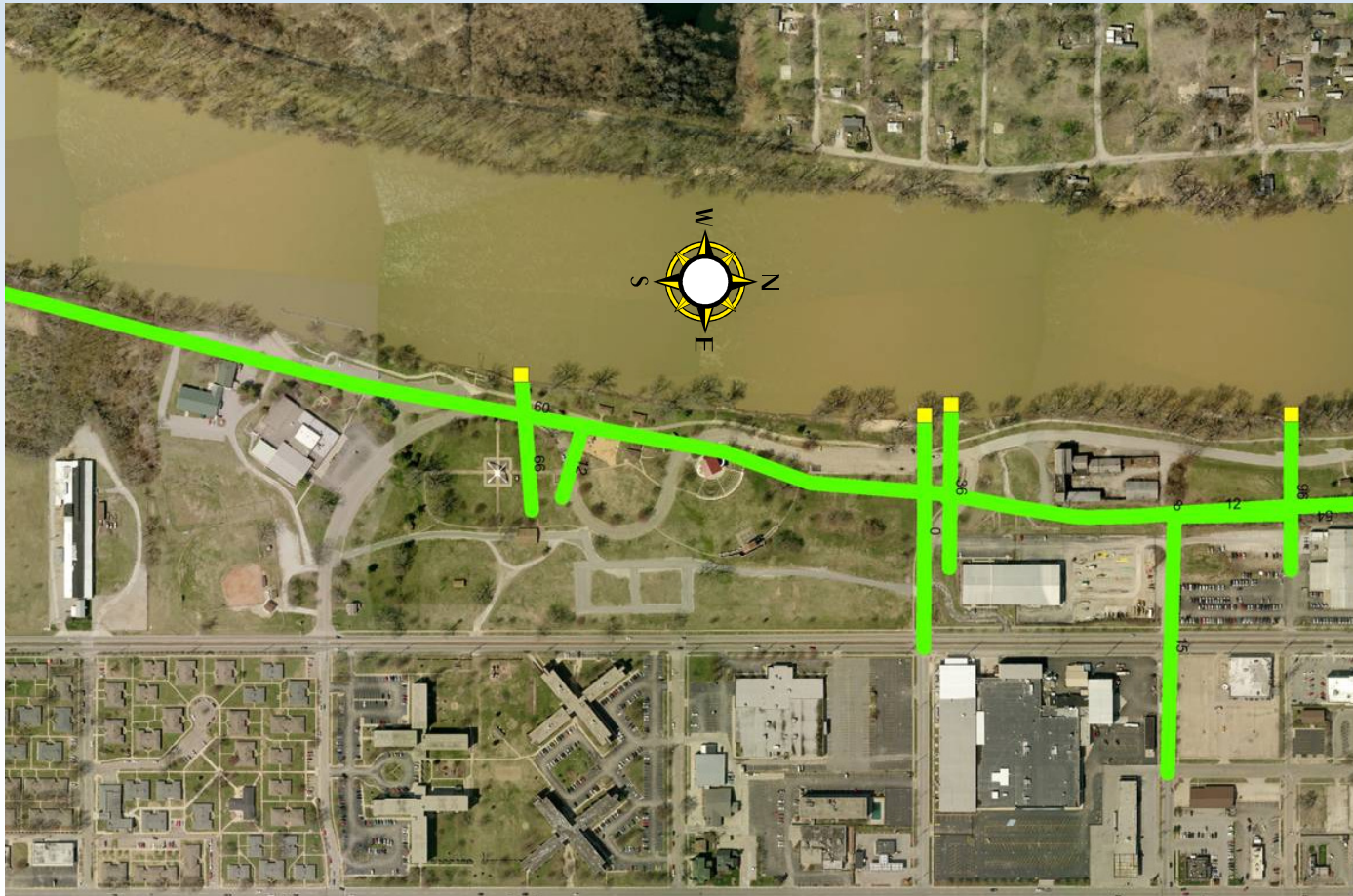
# Main Interceptor North End





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# Main Interceptor Fairbanks Area

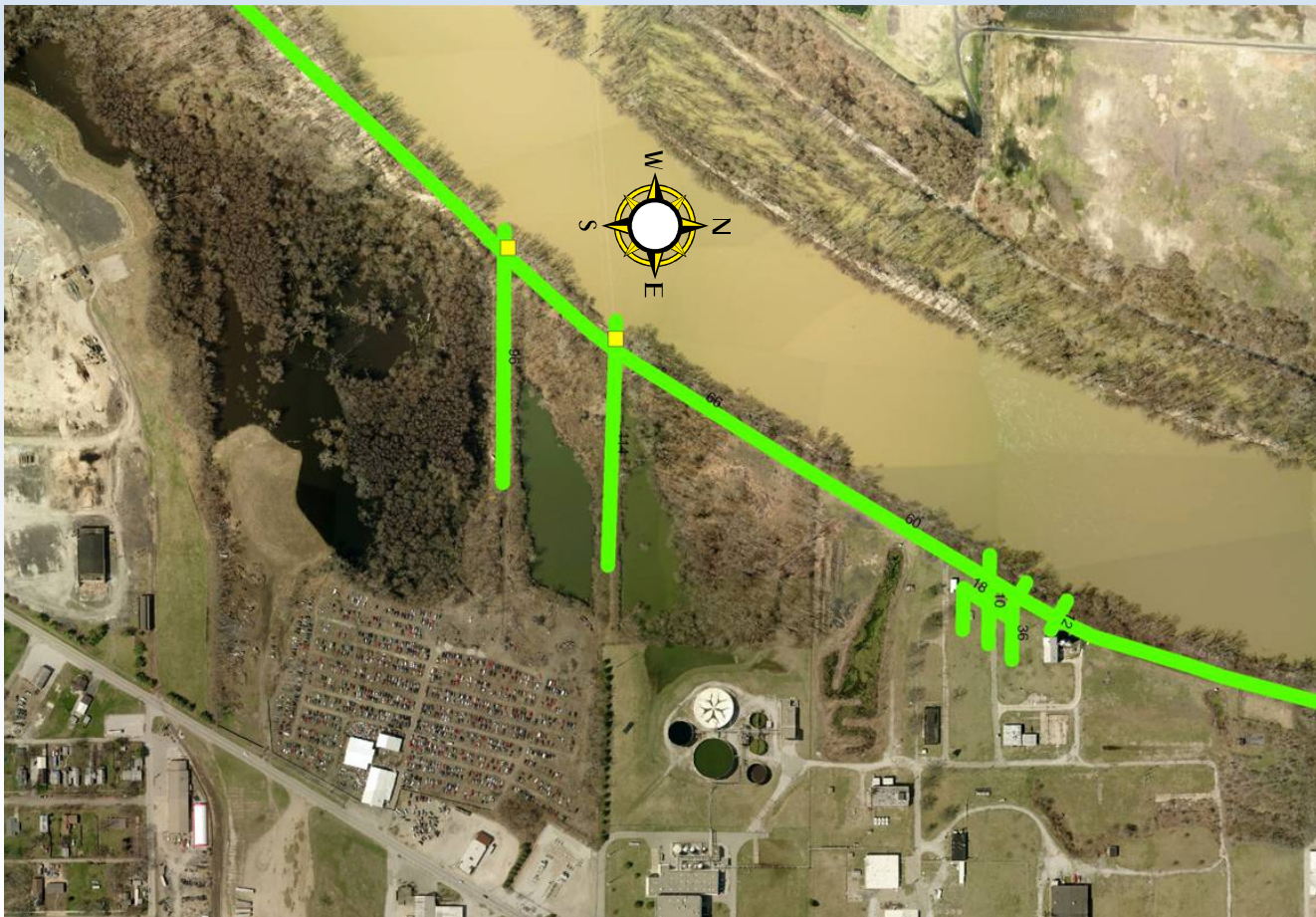






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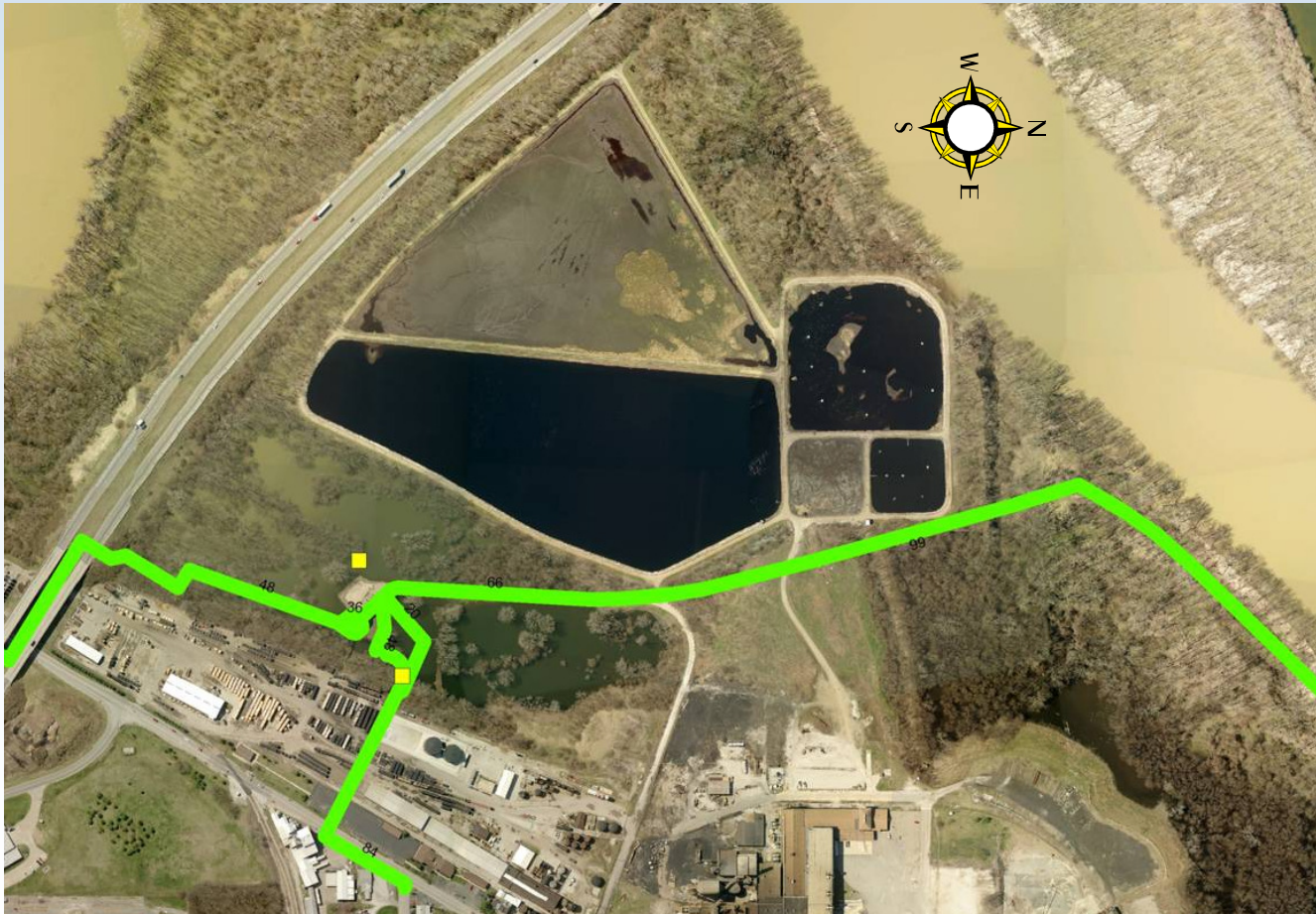
# Main Interceptor W.E.T. Area





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# Main Interceptor Int'l Paper Area

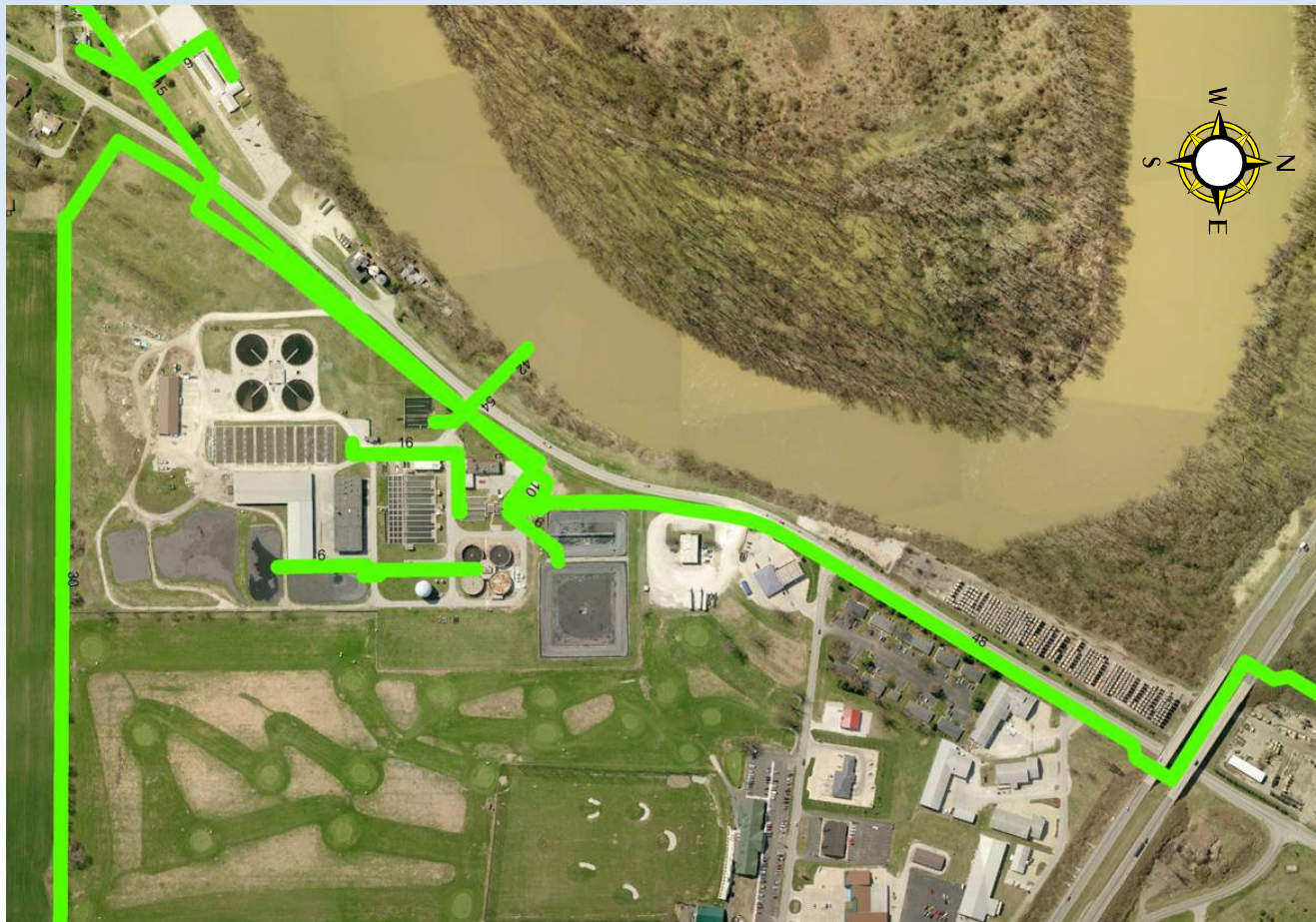






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# Terre Haute Waste Water Utility Area





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# C.S.O. Basics and EPA Mandates

- A Combined Sewer Overflow community collection system combines storm water and sewage
- Newer communities are mandated to have separate storm water and sewage systems
- Most of Terre Haute utilizes a combined system
- During heavy rainfalls, rainwater mixes with sewage and overflows into the river when the treatment plant cannot keep up with the storm
- This “overflow” is 95% storm water



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# C.S.O. Basics and EPA Mandates

- Currently, the City has an average of 25 overflows per year due to heavy rainfalls
- The EPA and IDEM are mandating that the City address this situation
- Because storm water includes elements such as e-coli from bird feces, that can be harmful to our environment, this overflow will also need to be treated or held until it can be treated
- All of this is part of the 1972 U.S. Clean Water Act and its related amendments





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# C.S.O. Basics and EPA Mandates

- The EPA will limit the City to 4 overflows a year
- Even though the City has been working on a Long Term Control Plan (LTCP) since 1999, our deadline to submit the plan for approval is September of 2010
- A plan was submitted for approval in 2005; however, prior to its final approval new requirements and rules were implemented
- Since that time, the City's consultants have been working on a new plan that complies with today's requirements and rules



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# Paying for this Mandate

- One crucial point is that the U.S. EPA will tell the City how much money it needs to spend on the overflow solution based on median household income – the City does not get to determine this
- The City will have 20 years to implement the LTCP
- Sewer rates will be raised to a minimum of 2% of median household income (\$660/household/yr)
- Total minimum estimated cost is \$130 million
- This will be paid for by sewer user rates



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# Solution Options

- The City's LTCP needs to be:
  - Affordable
  - Able to be approved by IDEM
- There are four ways to store this water until it can be treated:
  - Large Tunnel
  - Underground Storage Tanks
  - In-line Storage in existing lines
  - Holding Lagoons
- Due to the layout of the City and the existing system, the overall plan will likely utilize a combination of these solutions



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# Lagoon Use

- The lagoon would be for the storage of “dirty” storm water – **NOT** raw sewage
- All storm water will run through a clarifier to remove solids and debris
- The water would be aerated and chlorinated to control odor
- There would be no sewage smell or visible signs of sewage
- The site would be turned into a wetlands area with trees and wild grasses planted on the perimeter
- Will save taxpayers/ratepayers approximately \$9 million



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# International Paper Detail of Lagoons







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# Lagoon Use (Continued)

- Only one of the current five lagoons would be used – indicated by the darker color on the previous page
- The rest of the area would be used as a wetlands and wildlife area, with a trail adjacent to the river that is connected to the Downtown area and Fairbanks Park
- For additional information, please go to <http://www.terrehautecleanwater.com>